NOTES AND NEWS.

FLORIAN CAJORI, CHAIRMAN OF COMMITTEE.

Dr. OSCAR PERRON, who since 1910 has been professor of mathematics at Tübingen, is called to a professorship at Heidelberg.

Professor ARNOLD EMCH, of the University of Illinois, has accepted a position on the summer session faculty of the University of California for the coming summer.

Western Reserve University announces the continuation of the teachers' class in mathematics into the second semester. This takes the form of a course in the history of mathematics, conducted by Mr. ALVA H. FORD, of the department of mathematics of Adelbert College.

Professor ANTONIO FAVARO, the well-known Italian historian of mathematics and science, has recently made a biographical study of Niccolò Tartaglia. The results of his researches are published in *Isis* for November, 1913, and in a pamphlet, *Per la biografia di Niccolò Tartaglia*, Firenze, 1913.

The Macmillan Company announces for spring publication "The Geometry of Four Dimensions," by HENRY PARKER MANNING, and "Memorabilia Mathematica. The Philomath's Quotation Boook," by ROBERT E. MORITZ, of the University of Washington.

The paper on "Science and mathematics in vocational schools," which was read by Professor FLORIAN CAJORI, of Colorado College, before the Central Association of Science and Mathematics Teachers at Des Moines, Iowa, on November 28, has been published in the February number of *School Science and Mathematics*.

The "History of Japanese Mathematics," by D. E. SMITH and YOSHIO MIKAMI, announcement of which was made in the MONTHLY some time since, has appeared from the press of the Open Court Publishing Co. This work places within reach of English readers a field of mathematical history which hitherto has been quite inaccessible.

The thirty-fourth regular meeting of the Chicago Section of the American Mathematical Society was held at the University of Chicago on Friday and Saturday, April 10, 11, 1914. There were 74 persons in attendance upon the various sessions, including 47 members of the Society. This was the second meeting of the Section which was designated as a regular meeting of the Society at Chicago. The first was in December, 1913.

The February number of the *School Review* contains an article on "A plan for testing methods of teaching elementary mathematics," by Professor G. W. MYERS, of the School of Education, University of Chicago. It contains an account of an interesting experiment made by a high school teacher who undertook to test systematically the heuristic method as against the expository method of teaching first year algebra. He chose for the experiment two of his first year

algebra classes that were, in his judgment, similarly circumstanced and nearly equal in ability. One class was taught by the heuristic method as nearly as the teacher could administer it, and the other was taught entirely by the plan of direct exposition. Mr. Myers makes a plea for more experiments of this kind.

On January 12 occurred the death of CALVIN MILTON WOODWARD, professor emeritus of mathematics and dean of the school of engineering at Washington University, St. Louis, Mo. He was the originator and director of the St. Louis Manual Training School. One of his last important publications is a text on "Applied Mechanics for Engineering and Architectural Students." Professor Woodward was an active and influential member of various scientific and educational organizations, and was once president of the American Association for the Advancement of Science.

Two fellowships in the department of mathematics and two in the department of physics at the Rice Institute will be filled for the academic year 1914–15, each of the annual value of seven hundred and fifty dollars ($750). The successful candidates will be expected to enter upon a course of study and research work leading to the degree of Doctor of Philosophy, and also to assist with elementary teaching in mathematics or physics for about six hours per week. Applications accompanied by testimonials and a full statement of previous work and training should be addressed to the department of mathematics or to the department of physics, The Rice Institute, Houston, Texas.

Mr. CLIFFORD N. MILLS secured the degree of A.M. at the University of Indiana at the close of the last semester and is now acting professor of mathematics at the South Dakota State College at Brookings, in the place of Dr. G. L. Brown, who has been made acting president.

HENRY FREDERICK BAKER, Sc.D., F.R.S., has been elected Lowndean professor of astronomy and geometry at the University of Cambridge in succession to the late Sir Robert Ball. Before this election Dr. Baker was fellow and lecturer of St. John's College, and Cayley university lecturer in mathematics at Cambridge. He has held the presidency of the London Mathematical Society and of the Cambridge Philosophical Society.

In recent years several German professors of mathematics have called public attention to the fact that the number of mathematical students at the various German universities is larger than the probable number of mathematical positions in the German schools. According to the *Jahresbericht der Deutschen Mathematiker-Vereinigung*, volume 22 (1913), page 369, the number of mathematical students is much smaller during the current year than it has been during recent years. The number of women students of mathematics is, however, still on the increase in the German universities.

July 24, 1914, is the date for the Napier Tercentenary Celebration, to be held in Edinburgh, Scotland. The celebration will be held under the auspices of the Royal Society of Edinburgh. We quote from a recent circular the following: " The Celebration will be opened on Friday with an Inaugural Address by Lord

of Appeal Sir J. Fletcher Moulton, F.R.S., LL.D., followed by a reception given by the Right Honourable the Lord Provost, Magistrates, and Council of the City of Edinburgh. On Saturday and Monday the historical and present practice of computation and other developments closely connected with Napier's discoveries and inventions will be discussed. . . . Among many who have expressed a warm interest in the Celebration and who hope to take part in the Congress, may be mentioned Professor Andoyer, Paris; Professor J. Bauschinger, Strassburg; Professor Hume Brown, Historiographer Royal for Scotland; Professor Florian Cajori, Colorado, U. S. A.; Professor G. A. Gibson, Glasgow; Dr. J. W. L. Glaisher, Cambridge; Professor Lang, St. Andrews; Professor Macdonald, Aberdeen; Professor E. Pascal, Naples; Professor Karl Pearson, London; Professor David Eugene Smith, New York; Professor Steggall, Dundee; Professor Whittaker, Edinburgh. . . . Relics of Napier, collected by Lord Napier and Ettrick and other representatives of the family, will also be on view; and it is intended to bring together for exhibition books of Tables and forms of Calculating Machines, which may reasonably be regarded as natural developments of the great advance made by Napier." It is planned to issue a memorial volume containing the addresses and papers read before the Congress, and other material of historic and scientific value. Mathematicians from all countries are invited to attend the celebration.

It will be recalled that the floods last year prevented the Ohio teachers of mathematics and science from holding their annual meeting. Hence the following report from Professor S. E. Rasor, Vice-President of the association, is most gratifying.

"The tenth annual meeting of the Association of Ohio Teachers of Mathematics and Science was held at the Ohio State University, Columbus, Ohio, Friday evening, April 3 and Saturday, April 4. The Friday evening address was given by James F. Barker of the Cleveland East Technical High School. On Saturday the mathematics section listened with much interest and lasting impression to the addresses by Professor H. E. Slaught of the University of Chicago. Papers and discussions were also presented before this section by a number of prominent Ohio teachers. A large and most enthusiastic and representative body of teachers from the colleges and secondary schools of the state were present and declared the meeting to be the best in the history of the Association. A significant feature of the meeting was the fact that of those present about ninety-five per cent. were men. The members of the association were guests of the University at a complimentary noon-day luncheon on Saturday. Officers for the coming year were elected as follows: President, C. C. Morris, Ohio State University, Columbus, Ohio; Vice-President, S. J. Mauckley, Woodward High School, Cincinnati, Ohio; Secretary-Treasurer, E. W. E. Schear, Ottebein University, Westerville, Ohio; Assistant Secretary, Miss Margaret Devereaux, Alliance High School, Alliance, Ohio."

The twenty-sixth educational conference of the academies and high schools in relation with the University of Chicago was held at the University on Friday

and Saturday, April 17–18, 1914. At the mathematics section two leading questions were discussed (1) The comparative merits of home study and supervised study at the school; (2) Reviews of mathematical literature for teachers.

The first topic was presented by Mr. C. M. Austin, of the Oak Park High School, who gave a resumé of an extended paper on this subject by Mr. E. R. Breslich, based upon a careful investigation at the high school connected with the University of Chicago School of Education.

The second topic was introduced by Mr. H. C. Wright, of the University High School and Professor H. E. Slaught, of the University of Chicago. Mr. Wright presented a resumé of the chief articles published in the *Mathematics Teacher* during the past six years, and Professor Slaught explained the character of the literature published in the MONTHLY since it was reorganized in January, 1913, and dedicated to the interests of teachers of mathematics in the early collegiate and advanced secondary fields. The fact was brought out and emphasized that in our associations of secondary teachers of mathematics the discussions during the past ten or twelve years have dealt primarily with pedagogical and administrative schemes and that the journals representing these associations, such as the *Mathematics Teacher* and *School Science and Mathematics*, have properly and naturally reflected these aspects. On the other hand, little or no attention has been given to the *teachers themselves* who are by far the most important factor in any educational scheme, and who need sources of inspiration and power outside of their daily routine. Such inspiration and quickening of enthusiasm the AMERICAN MATHEMATICAL MONTHLY is trying to provide and it is the only journal in this country occupying this field. Special reference was made to the study of synthetic projective geometry as absolutely essential to provide a background and a viewpoint for the teacher of elementary plane geometry. It is believed that a text-book will be soon forthcoming which will be suitable not only for use in first or second year college classes, by those who are preparing to teach, but also for private study in small groups by teachers now in the service.

Errata. The following errors have been noted in the December issue, 1913. On page 304, line 10 up should read $z^3 = -6r\rho^2$; line 8 up should read $\rho = \pm 6k\sigma^3$; line 5 up should read $y = p^3 \mp 6\sigma^3$. On page 305, line 19 up, the first double sign should be $\mp$.

All copies of the MONTHLY for January, 1913, have been exhausted. The demand for sample copies was so great for this particular number that the supply was entirely inadequate. Any one who may know of extra copies not belonging to sets will confer a great favor by informing the MANAGING EDITOR.